

2015-2016 SMALL GAME HUNTING PROSPECTS



Missouri Department of Conservation

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INTRODUCTION

Welcome to the 2015-16 Small Game Hunting Prospects!

Thanks for your interest in the world of small game hunting! Missouri Department of Conservation staff developed this new report to help small game hunters across Missouri learn more about the game they pursue, factors that affect the presence and abundance of game, and where to hunt various wildlife. *Small Game Hunting Prospects* is different from small game reports of the past, in that it blends the results of population trend surveys with introductory information on small game species, their management, and hunting tips.

Small Game Hunting Prospects is updated yearly and covers a variety of small game species and highlights Department conservation areas statewide where hunters can pursue them. To find huntable conservation areas not featured in *Small Game Hunting Prospects*, you can search the Conservation Area Atlas at mdc.mo.gov/atlas.

Regular sections will include profiles of the most popular small game species, Manager's Notes for a sample of Quail Emphasis Areas across the state, and a Small Game Grab Bag with tips and tricks for small game hunters. Species profiles include information on life history, habitat management, ongoing research, and a list of featured hunting spots for 2015-16. Manager's Notes highlight management on a sample of conservation areas and provide hunting prospects for small game on that area.

Our intent is that new and seasoned hunters alike will use this resource to learn more about the game they hunt and try out a new hunting spot. For season dates, limits, permit information, and a list of areas with nontoxic shot requirements, please see the *2015 Missouri Hunting and Trapping Regulations* booklet or the *2015 Migratory Bird Hunting Digest* (see below).



Whether you are a new or veteran hunter, good luck!

And remember—safe hunting is no accident!

DOVE

MOURNING WHITE-WINGED EURASIAN COLLARED-DOVE

ABOUT DOVES

Missouri is home to three species of dove that are legal to harvest during the state's dove hunting season. Mourning doves are the most common species found statewide, but hunters may also encounter white-winged doves or Eurasian collared-doves. White-winged doves are common to southwest states and Mexico, and Eurasian collared-doves have arrived in Missouri fairly recently and are increasingly common, especially near urban areas.

HUNTING AND MANAGEMENT

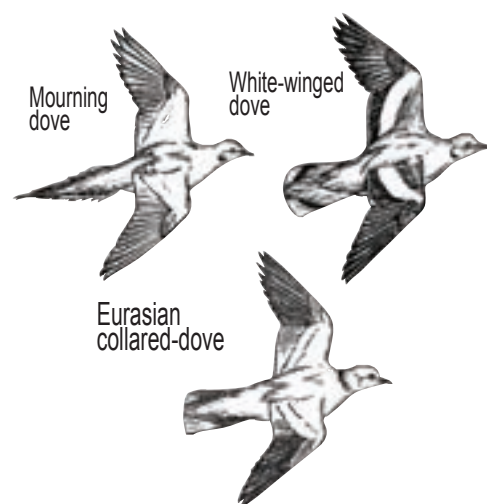
Doves are popular birds to hunt in Missouri. They are found throughout the state and are often abundant, using both wild and planted food sources. Doves are fun to hunt because they are fast, agile fliers and test a shooter's skills by twisting and turning through the air. Because doves are sensitive to hunting pressure, many dove-hunting fields are managed with no-hunting periods throughout the season so birds have the opportunity to feed without being bothered, which keeps them in the area longer.

All you need to hunt doves is a shotgun and plenty of shells (#7 ½ or #8 shot). Many hunters also pack along a piece of camo material for building a makeshift blind and a bucket or shooting stool to sit on. Camo clothing is also recommended to help hunters remain undetected, and dove hunters should consider eye and ear protection as well. Once you've found a promising dove field, the next step is to decide where in the field to hunt. If possible, scout the field a day or two before the season opens and observe how the doves enter and use the field. Oftentimes you will find that many or most of the doves use the same flight path. If possible, set up along this flight path in a spot that offers concealment but still allows you to see incoming birds. Also, because doves regularly perch in dead limbs before entering the field to feed, look for tall dead trees or limbs near the feeding field. Decoys, including motion wing decoys, may coax birds in closer.

Mourning doves are habitat generalists, which means they use many different habitat types across their range. Therefore, it's not really necessary to conduct habitat management specifically for doves, although species benefit from many types of habitat management. The Department plants fields of seed-producing grains and sunflowers for forage and maintains low vegetation height and some bare ground to provide conditions favored by doves.

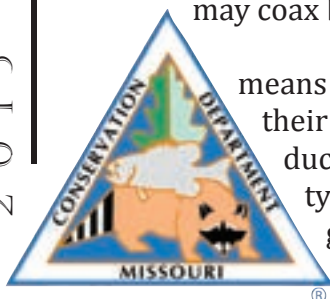


Mourning dove



FOODS COMMONLY PLANTED FOR DOVES

- Black-oil sunflower seeds
- Millet
- Buckwheat
- Oats
- Popcorn
- Waste grain



EURASIAN COLLARED-DOVES

If you think you may have recently seen or heard a dove that didn't look or sound quite right, chances are you've encountered a Eurasian collared-dove. This species was introduced to the Bahamas from Europe and Asia in the 1970s. By the 1980s, it had made its way to Florida, and from there it has spread rapidly throughout much of the United States.

Eurasian collared-doves are larger than mourning doves, weighing 5-6 ounces, or about 15% more than their native mourning dove relatives. In addition to a stockier build, Eurasian collared-doves also have a squared tail tip rather than the pointed tail of a mourning dove. Their coloration is similar, though collared doves tend to have a lighter gray color than mourning doves. In addition, Eurasian collared-doves have a black crescent on the nape of their necks (hence the "collar" in their name), and broad white patches on the tail.

Like mourning doves, Eurasian collared-doves are also agile fliers. Collared-doves are seed eaters and may visit the same feeding areas as other dove species, giving you an opportunity to compare the two species. Eurasian collared-doves are considered legal game in Missouri, and may be included as part of a combined daily harvest along with mourning doves and white-winged doves.



Eurasian collared-dove

2015 FEATURED HUNTING SPOTS

Many Conservation Areas are actively managed for doves. Managed dove hunting fields are planted in sunflowers, wheat, millet, buckwheat, corn, or a combination of these. Each field provides a different type of hunting experience. Weather conditions in the spring and early summer of 2015 made it very difficult for planting and managing dove fields. Hunters are cautioned that field conditions may be fair or poor in many areas this fall.

Below are some suggested dove hunting areas. To locate other dove fields, contact the Regional Office in the area that you'd like to hunt. Dove hunting maps are also available on the Department's website at mdc.mo.gov/18183.

Bilby Ranch Lake CA (Nodaway Co.)

Davidson-Paris CA (Howell Co.)

Franklin Island CA (Howard Co.)

Frost Island CA (Clark Co.)

J.N. Kern Memorial WA (Johnson, Pettis Counties)

Marais Temps Clair CA (St. Charles Co.)

Platte Falls CA (Platte Co.)

Thomas Hill Reservoir CA (Macon, Randolph Counties)

Weldon Spring CA (St. Charles Co.)

Whetstone Creek CA (Calloway Co.)

IF YOU HARVEST A BANDED DOVE,
Please report it!

1-800-327-BAND
www.reportband.gov

We want the band number - you keep the band!



RABBIT EASTERN COTTONTAIL SWAMP

Eastern cottontail

ABOUT RABBITS

Of the two rabbit species that may be hunted in Missouri, the eastern cottontail is the most common. Cottontails are well distributed throughout Missouri, and they provide fun, challenging hunting opportunities to novice and experienced hunters alike. Rabbits are prolific breeders, and numbers fluctuate from year to year and place to place. Overall, rabbit numbers have been declining since the mid-1950s due to loss of habitat. However, cottontails can be found in all 114 of Missouri's counties. They prefer brushy cover, dense weedy areas, and thickets. Rabbits feed almost entirely on plants. Preferred foods include grasses, wheat, and white clover. During heavy snow cover, they eat buds, twigs, bark, and sprouts to survive.

Swamp rabbits are a little larger than cottontails with shorter, rounder ears, and the tops of the hind feet are reddish-brown. Swamp rabbits are localized to lowlands along stream banks and drainages of the Mississippi River in southeast Missouri. Hunters can recognize their presence in an area by their unusual habit of leaving droppings on logs and stumps. Swamp rabbits are good swimmers and can escape predators by diving into water and paddling away. This species' numbers have been declining due to loss of lowland hardwood forests and swamps.



Swamp rabbit

HUNTING AND MANAGEMENT

One reason for rabbit hunting's popularity is its simplicity. Some people use dogs, while others merely walk the fields and meadows — either way, it's fairly fundamental. No decoys, game calls, camouflage clothing, or high-tech gadgets are needed to provide a sporting pursuit and a tasty meal.

Although some rabbit hunters won't take to the field until the first good snow, rabbit numbers are typically higher when the season starts in October than during the cold weeks of January and early February. Fall is the season when rabbit populations and protective cover are both at their highest levels. As habitat availability is reduced by winter weather and crop harvests, rabbit populations shrink.

Good cottontail habitat includes well-distributed protective cover, a good year-round food supply, and a safe place for nesting. Brush piles can be created by loosely piling brush over rocks, old culvert pipes, or other unused equipment. Keeping the brush open at the ground level allows for freedom of movement. Place piles in close proximity to other cover such as briars, fencerows, or ungrazed pastures.

Landowners in southeast Missouri can improve habitat for swamp rabbits by protecting bottomland hardwood forests from clearing and replanting areas to native tree species. These rabbits also need upland refuge to escape flooding. Again, creation of brush piles and dense vegetation increases habitat for swamp rabbits.



HUNTING AND RABBIT POPULATIONS

Though it may seem surprising, heavy hunting pressure does not greatly affect rabbit populations. Rabbits, like most small game, have high annual mortality (about 80% per year) whether they are hunted or not. If rabbits are not hunted, their populations are usually affected by other factors like parasites, disease, or other predators.

Rabbits are prolific breeders, producing 3-4 litters of 3-8 young each year! If one pair of cottontails experienced no mortality, they could produce up to 350,000 rabbits in just 5 years! Rabbits become sexually mature at two to three months of age, so populations can quickly increase with good habitat conditions. Abundant rainfall this spring has produced thick vegetative cover that rabbits use, resulting in local rabbit population booms across the state.

2015 FEATURED HUNTING SPOTS

Cottontails are abundant on many conservation areas. Below is a list of selected areas that have good cottontail populations. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas.

Cottontails

Atlanta CA (Macon Co.)

Blind Pony Lake CA (Saline Co.)

Blue Springs Creek (Crawford Co.)

Bois D'Arc CA (Greene Co.)

Clear Creek CA (Barton, Vernon Counties)

Hunnewell Lake CA (Shelby Co.)

Ionia Ridge CA (Benton Co.)

Maintz Wildlife Preserve (Cape Girardeau Co.)

Manito Lake CA (Moniteau Co.)

Moniteau Creek CA (Howard Co.)

Tarkio Prairie CA (Atchison Co.)

Truman Reservoir Management Lands -

Bethlehem (Henry Co.)

White River Trace CA (Dent Co.)

DID YOU KNOW?

Rabbits often flee from predators in a zig-zag pattern and can reach speeds of up to 18 mph!



BOBWHITE QUAIL

ABOUT QUAIL

Known simply as “quail” or “bobwhite,” the northern bobwhite can be found in every county in Missouri. Bobwhites are so named for the male’s cheery call issued from fenceposts or other elevated perches in late spring and through summer. Bobwhites are ground-nesting birds and lay clutches of a dozen or so eggs in a nest at the base of a grass clump. Chicks hatch fully feathered and mobile and immediately begin hunting insect prey, which they depend on for rapid growth. By mid-autumn, bobwhites assemble into coveys of 10 to 15 birds and generally eat seeds. Annual mortality is high, and most bobwhite young live less than a year. The quail’s high reproductive capacity counter balances this high mortality rate, and bobwhites are capable of rapid population increase when habitat conditions are favorable.



Northern bobwhite quail

HUNTING AND MANAGEMENT

Few experiences afield match the heart-stopping thrill of a covey of quail exploding into flight. During hunting season, quail can be found in grassy or shrubby areas, especially near food sources. Bobwhites eat row crops such as corn and beans, but also readily consume wild seeds of ragweeds, sunflowers, and crotons. Areas with these cultivated and wild seed foods are good places to find quail, especially when brushy cover such as a plum thicket or brush pile is located nearby. A light-weight, fast swinging shotgun works well. Most hunters use size 7 ½ or 8 shot and an open choke.

Savvy hunters know that, in order to be successful at putting quail in the bag, it’s important to pick out and focus on a single bird — a difficult feat when a dozen or more take to the air at once. While not necessary for quail hunting, a good bird dog aids tremendously in finding bobwhites and adds to the enjoyment of the hunt. In fact, many quail hunters enjoy the dog work even more than the challenging shooting.

Like all wildlife, quail depend on suitable habitat to thrive. Good quail habitat consists of grassy/weedy areas for quail to nest, roost, and raise broods; well-distributed patches of brushy cover for loafing and escaping predators; abundant food resources; and enough interspersed patches of bare ground to facilitate movement and foraging. Above all, quail thrive where plant diversity is high. Large blocks of land in the same type of cover — whether row crops, grass, or brush — is rarely good quail habitat. Management practices such as prescribed burning, disking, and prescribed grazing can be used to produce and promote good quail habitat.



GOT BUGS?

Quail chicks must grow from the size of a bumble-bee to an adult in just a few months! To support this rapid growth, they need access to lots of insects, spiders, and other invertebrates high in protein. Few bugs = few bobwhites.

ONGOING QUAIL RESEARCH

Perhaps no bird in America has been more studied than the bobwhite. Yet for all that biologists have learned about this bird, knowledge cannot compensate for loss of habitat.

Recently, the Department began a project in southwest Missouri to better understand bobwhite response to different management techniques. Recently, managers on a few conservation areas in Dade and Lawrence counties noted that quail on large, diverse grasslands initiated covey break up and nested several weeks earlier than coveys on nearby areas managed using crop strips, nesting patches, and brushy hedgerows.

Results thus far indicate that covey break up and nest initiation occur earlier on large grassland landscapes managed with prescribed fire and moderate grazing. Radio collars attached to male and female bobwhites allow researchers to locate nests and broods throughout the summer. Adult quail and their associated broods have shown a strong tendency to use moderately grazed habitat patches, and have almost totally avoided the unburned and ungrazed portions of the study areas. In addition, early results suggest that nest success may be greater on extensive grasslands under fire and grazing management regimes. Hunters who harvest a quail with an aluminum leg band or radio transmitter are asked to report it to the nearest Department office.

2015 FEATURED HUNTING SPOTS

Bobwhites can be found on many conservation areas across the state. While many of these areas provide quail hunting opportunity, several are designated as Quail Emphasis Areas (QEAs) and are managed with quail as a main focus. Managers' Notes from a sample of QEAs are also available starting on Page 26 of this report. Below are some suggested quail hunting opportunities. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas.

Bunch Hollow CA (Carroll Co.)

Bushwacker Lake CA (Barton, Vernon Counties)

Lamine River CA (Cooper, Morgan Counties)

Maintz Wildlife Preserve (Cape Girardeau Co.)

Pony Express Lake CA (DeKalb Co.)

Schell-Osage CA (Vernon, St. Clair Counties)

Thomas Hill Reservoir CA (Macon, Randolph Counties)

White River Trace CA (Dent Co.)



The Weed Creed

Simply put, quail need lots of weed patches to be successful. Ragweed, pigweed, lambsquarters, barnyardgrass, and smartweeds are a few of the often-maligned plants favored by quail. Landowners and managers who are serious about managing their property for quail should take the following creed to heart:

I am a recovering weed hater.

I will no longer view all weeds as bad.

I will embrace weeds for the habitat they provide.

I will value my quail more than a manicured farm.

I will remember that hay fever means more quail food.

I will learn to love my weeds.

For technical assistance in providing brood habitat and other quail needs, contact your local Private Land Conservationist or visit mdc.mo.gov/node/3678.

FROG

AMERICAN BULLFROG
GREEN

ABOUT FROGS

Bullfrogs and green frogs look similar but are easy to tell apart from other frogs in Missouri, due to their relatively large size at maturity. They prefer aquatic edge habitats that offer still, shallow water with aquatic and/or terrestrial vegetation. This provides both cover and food, such as insects and nearly any other small animal that will fit in their mouths. Ponds, lake and river banks, wetlands, and other vegetated waterways are all great places to find frogs. During or after a rain, frogs can be found anywhere as they attempt to locate new habitats.

American
bullfrog

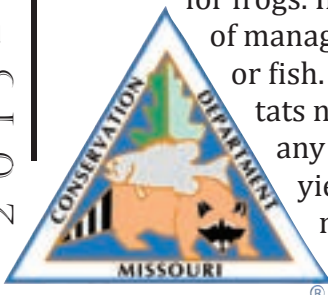
Green frog

HUNTING AND MANAGEMENT

Pursuing frogs is very popular in Missouri, partly because hunters are permitted to hunt frogs with so many different methods. With a fishing permit, frogs may be taken by gig, trot-line, throw line, limb line, bank line, jug line, snagging, snaring, grabbing, or pole and line. With a hunting permit, frogs may be taken by crossbow, pellet gun, or .22 or smaller caliber rim-fire rifle or pistol, and with either permit may be taken by hand, hand net, bow or atlatl. Frogs may also be pursued during the day, or at night with an artificial light. During a full moon, frogs are typically more skittish because they feel more exposed, and are thus more difficult to approach. During a new moon, it is usually easier to get closer to them. Because frogs are amphibious and must keep their skin moist, they spend more time in the water and weeds during the day and are generally less visible around the banks than at night. Whether they're hiding or not, their location is often given away by their assertive croaks.

"Frogging" is a great way to introduce kids to hunting. Lethal weapons are not required, and froggers can catch and release if they want. Catching frogs by hand or hand net is exciting, since kids can get closer to frogs than to other small game species. Besides, most youngsters enjoy chasing a jumping, splashing, evasive frog around weeds and water.

Public and private landowners typically do not manage for frogs. Instead, frog populations are often the result of management for another species such as waterfowl or fish. Frogs are also common in aquatic edge habitats not subject to management or maintenance of any kind. Waters with few to no predators will yield the best frog populations, which is why newer ponds or very old ponds are generally plentiful with frogs.

VEGETATION THAT
ATTRACTS FROGS

- • • • •
- Cattails
- Willows
- Millet
- Various types of aquatic vegetation
- Grasses at water's edge or overhanging a bank

2015 FEATURED HUNTING SPOTS

Bullfrogs and green frogs can be found along nearly all waterways on Department conservation areas but especially on wetland areas and along rivers and lakes.

Froggers may want to try the suggested areas listed below. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas. Please contact the area before frogging, as some areas may experience seasonal waterfowl refuge closures.

Bilby Ranch Lake CA (Nodaway Co.)

B.K. Leach CA (Lincoln Co.)

Bob Brown CA (Holt Co.)

Cooley Lake CA (Clay Co.)

Coon Island CA (Butler Co.)

Four Rivers CA (Bates, Vernon Counties)

Lamine CA (Cooper, Morgan Counties)

Nodaway Valley CA (Andrew, Holt Counties)

DID YOU KNOW?

- Bullfrogs are ambush-style predators that will eat any live prey they can fit in their mouths, including insects, fish, mice, birds, and snakes!
- Frogs will often relocate during wet conditions to keep their skin moist while they're on the move. So make sure to recheck your frogging spots after it rains.



RING-NECKED PHEASANT

ABOUT PHEASANTS

Ring-necked pheasants were introduced to the United States from China in the 1880s and have become one of the nation's most popular game birds. Unlike most species not native to an area, pheasants have few negative impacts on native wildlife. Rather than displacing native species, pheasants have been able to thrive in agricultural areas where some native species, such as prairie chickens, have not. Early agricultural practices including the planting of small grain crops, large native grass hayfields, and weedy crop fields provided excellent nesting and brood-rearing habitat for the birds. Intensification of agriculture and the loss of Conservation Reserve Program, or CRP, acres throughout the Midwest have led to a decrease in pheasant habitat across its established range.



Ring-necked pheasant

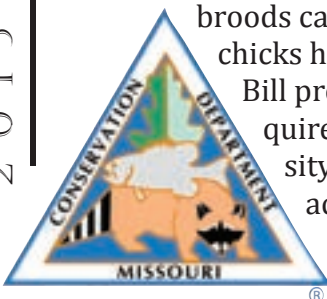
HUNTING AND MANAGEMENT

Pheasant hunting requires little equipment and can be a great way to spend time outdoors. Hunters in pursuit of other small game, usually bobwhite quail, often flush and take pheasants. Well-trained bird dogs are an asset for hunting large, grassy fields, but a few hunters walking side-by-side across a field can also produce and experience the explosive flush of a pheasant.

In an effort to bolster populations, wild pheasants from existing populations in Missouri, Kansas, Nebraska, and South Dakota were released from 1987-2000. Some areas continue to hold steady populations of birds, some maintain few birds, and others never established successful populations. Pheasant harvest in Missouri peaked in 1990 with 24,479 hunters harvesting nearly 90,000 birds. In the 2010-2011 season, 6,163 hunters harvested just over 16,000 birds.

Landowners in the pheasant's Missouri range can improve populations by providing ample nesting and brood-rearing habitat. Pheasant hens typically nest in grassy fields. Native warm-season grass mixes and brome fields tend to provide good nesting opportunity, and as with bobwhite quail, quality brood-rearing habitat is essential for pheasant populations to flourish. Diverse patches of mixed grasses, weeds, and forbs attract hundreds of insect species that pheasant chicks eat to fuel their rapid growth. Alfalfa and clover fields provide good brooding habitat, but many nests and broods can be lost in these fields if hay cutting occurs before mid- to late-July before chicks hatch or when they're too small to escape the mower. If you participate in Farm

Bill programs such as the CRP or the Environmental Quality Incentive Program, inquire about practices such as CP-25 or CP-42. These promote plant and insect diversity and can greatly enhance habitat conditions for pheasants. Other management activities that benefit pheasants include shrub plantings, prescribed burning, and avoiding fall tillage of crop stubbles. Pheasants are well adapted to agricultural landscapes, but it's critical to provide the habitat components they need.



PHEASANT MYTHS AND FACTS

Myth: Stocking helps restore populations.

Fact: Many studies have shown that stocked birds have a hard time establishing self-sustaining populations. Predators take about 90 percent of released birds.

Myth: High predator numbers have reduced pheasant numbers.

Fact: Most predators will eat birds, chicks, or eggs, but birds have adapted to withstand high levels of predation by producing many young. Habitat loss is the number one cause of population declines, and predator problems are intensified by reduced habitat.

Myth: Hunting lowers the pheasant population.

Fact: Hens are protected from harvest and roosters are polygynous, meaning that one rooster mates with multiple hens. Rooster-only seasons have very little impact on population size.

NEW FOR 2015-16 SEASON

Hunters may take pheasants statewide beginning with the 2015 youth season. This change was made because pheasants are already geographically limited in the state, and because harvest is restricted to male birds only, it does not impact the population.

WHERE TO HUNT

Pheasants are most abundant in northwest Missouri and portions of northeast Missouri. Conservation areas with good populations of pheasants are few. For more detailed information on where to find pheasants, call the Department's Northwest or Northeast Regional Office (contact info can be found on the Table of Contents page of this publication).



SQUIRREL

EASTERN GRAY FOX

Eastern gray squirrel

ABOUT SQUIRRELS

In Missouri, hunters may pursue two species of tree squirrels — fox squirrels, called “red squirrels” by many, and eastern gray squirrels. Fox squirrels are the larger of the two species. They tend to be found near the edges of timber stands, in isolated woodlots and open woods without much understory, along timbered ridges and uplands, and even in hedgerows. Grays are more likely to occur in extensive tracts of forest and bottomlands, but it’s not unusual to find both species using the same area.



HUNTING AND MANAGEMENT

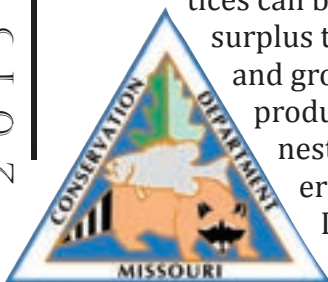
Few game species are as widespread and underused across Missouri as squirrels. Several decades ago, squirrel hunting was very popular, but today it’s common to have the woods to yourself. Squirrel hunting is a great introduction to hunting for young hunters. No specialized gear is needed, opportunities are frequent, and stealth and silence are not as critical as for deer or turkey hunting. Hunting squirrels is a great sport for seasoned hunters too. It hones observation skills and marksmanship, and it offers a chance to scout for other game such as deer or turkey. And, of course, a successful hunt results in some wonderful table fare.



Gray squirrels are early risers and become active at sunrise, while fox squirrels tend to come out later in the morning and are active during mid-day. The activity of both species slows considerably in the mid-day hours on hot, humid summer days.

Hunters new to squirrel hunting should remember to move slowly through the woods, scanning the treetops for movement, and listening for the sounds of bushytails jumping from limb to limb or cutting and dropping nut hulls. Upon finding a lot of fresh cuttings on the ground, find a comfortable spot nearby and sit down awhile — you’ll usually have a shot or two shortly.

Lands are rarely managed specifically for squirrels, but some common management practices can be of benefit. Forest stand improvement (FSI) involves the removal of inferior or surplus trees to thin a stand and allow the remaining trees to experience better health and growth. An added bonus of FSI is that mast (acorns, nuts, or other fruiting bodies) production often increases, too, providing abundant food resources. Squirrels often nest in cavities and hollow trees, so some of these should be retained on your property. Squirrels will readily use nest boxes as well. Learn more in All About Squirrel Dens.



WHAT DO SQUIRRELS EAT?

Missouri's squirrel season is long, running from late spring through late winter. Squirrel behavior and activity change throughout the year as they respond to differences in weather and food availability. For example, mid-day activity will often be different in winter than in summer, as squirrels forage or rest according to temperature. Likewise, a mulberry tree full of fruit could be a hotspot in June, but by October squirrels will be feeding on nuts and acorns. Be observant and adapt your hunting according to what the squirrels are doing or eating. Here are some common squirrel foods:

- **Spring:** buds, twigs, flowers, mushrooms, seeds of elms, maples, and oaks
- **Summer:** mulberries, hickory nuts, acorns, corn, walnuts, wild grapes, mushrooms, Osage orange fruit (hedgeapples)
- **Fall:** hickory nuts, pecans, acorns, walnuts, corn, Osage orange fruit (hedgeapples)
- **Winter:** nuts, acorns, bark, corn, buds

2015 FEATURED HUNTING SPOTS

Below are suggested areas that offer squirrel hunting opportunity. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas.

Apple Creek CA (Cape Girardeau Co.)

Anderson CA (Pike, Ralls Counties)

Angeline CA (Shannon Co.)

Clearwater CA (Reynolds Co.)

Daniel Boone CA (Warren Co.)

Granny's Acres CA (Benton Co.)

Lead Mine CA (Dallas Co.)

Mineral Hills CA (Putnam Co.)

Pea Ridge CA (Washington Co.)

Riverbreaks CA (Holt Co.)

Stockton Lake Managed Lands CA (Cedar, Dade, Polk Counties)

Settle's Ford CA (Bates, Cass Counties)

ALL ABOUT SQUIRREL DENS

- Gray and fox squirrels use both leaf nests and den cavities. Cavity nests are most often in the hollow trunk or large limb of a live tree, but squirrels will also use cavities in dead snags.
- Cavity nests are used more in the winter and during the spring reproductive period. These locations are warmer, more sheltered from weather and predators, and help keep the young protected. Leaf nests tend to receive more use in summer, perhaps because they're cooler than den nests. Hunters should not shoot into leaf nests, and should avoid shooting squirrels peeking out of cavities where they are unlikely to be recovered.



RAILS AND SNIPE

VIRGINIA RAIL SORA COMMON SNIPE

Sora

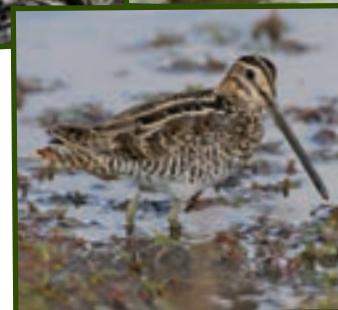
ABOUT RAILS AND SNIPE

Several rail species migrate through Missouri every year, including yellow, Virginia, sora, black, and king rails. Virginia and sora rails are the only two species that may be harvested, and sora is the most abundant of these. Rails are predominantly marsh birds and can be seen and heard on many wetland conservation areas lurking in thick vegetation. Rails are omnivores and eat a wide variety of plants, insects, snails, and crayfish with their long bill made for probing in moist soils.

The common snipe is aptly named, because it is common in Missouri's wetlands and soggy areas. This marsh bird uses its long bill to probe for insects, worms, and larvae that burrow in damp soil.



Virginia rail



Common snipe

HUNTING AND MANAGEMENT

Rails and snipe are a challenge to hunt. When flushed, these birds only fly a short distance and dive back into vegetative cover. Once back on the ground, the birds run quickly and are very hard to flush a second time. During peak migration, sora rails are abundant and will react to loud sounds such as a car door slamming or single, loud hand claps. Sora rails have several calls including a descending "whinny," a "ker-wee" sound, and a call that sounds like "weep." Snipe calls are a repeated "chip." The call of the Virginia rail sounds like pig-like grunts, "kid-dik."

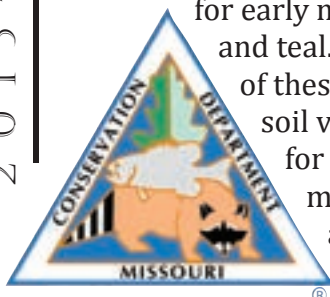
Being secretive, rails are found in dense moist soil vegetation in water varying from 0-28 inches. Research has shown that sora rails prefer water depth ranging from 2-6 inches in the fall, while Virginia rails prefer slightly shallower water less than 2 inches. Snipe tend to be found at the edges of pools where water and vegetation meet.

In most wetlands, areas of lower elevation in a pool never dry, unless the summer is extremely dry. These areas produce tall, thick wetland vegetation. In late August, water pumps at some managed wetland areas are turned on and wetland pools slowly fill to create habitat

for early migrants such as rail, snipe, shorebirds, and teal. Water is allowed to spill into the edges of these lower areas to irrigate native moist soil vegetation, which is a good food source for waterfowl. Muddy flats created by this management are great stopover habitat along the migration routes of shorebirds and snipe.

"I SORA SORA!"

A group of sora rails can collectively be known as an "ache," "expression," or "whinny" of soras.



ONGOING MARSH-BIRD RESEARCH

Several research projects are being conducted on secretive marsh birds on conservation areas. Researchers are trying to determine the effects of different wetland management on marsh birds at different times of the year to better manage for their populations.

Studies include measuring birds' preferred water depth, vegetation type and density, plant height, and the amount of open water that these birds prefer in the spring and fall. A research project studying the effects of early-season flooding on fall migrating rails and snipe began in the fall of 2014 and is ongoing. On several areas, managers flood one pool in August, nearly two months earlier than a normal season. Researchers then monitor rail and waterfowl use of this early flooded pool, and compare the use to other pools that are flooded later in the season. Results are being compiled and will hopefully be available in the next few years.

Each year, marsh-bird surveys are also conducted on several Department areas. These surveys use a playback of recorded rail and bittern calls to attract a response from birds hiding in the vegetation to determine whether they are present in an area or not. Birds that are heard or seen are mapped and these birds' numbers are tracked each year.

2015 FEATURED HUNTING SPOTS

Rail and snipe hunting opportunities are very limited by weather, especially precipitation. Due to a very wet 2015 spring and summer, you should contact the area manager at the areas you are interested in hunting before making a trip.

Below are suggested areas that offer rail and snipe hunting opportunity. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas.

B.K. Leach CA (Lincoln Co.)

Bob Brown CA (Holt Co.)

Duck Creek CA (Bollinger Co.)

Eagle Bluffs CA (Boone Co.)

Fountain Grove CA (Livingston, Linn Counties)

Grand Pass CA (Saline Co.)

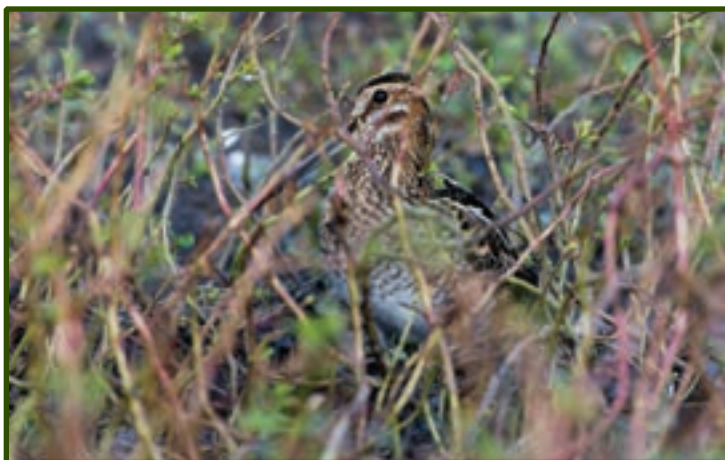
Montrose CA (Henry Co.)

Nodaway Valley CA (Holt, Andrew Counties)

Otter Slough CA (Butler, Stoddard Counties)

Settles Ford CA (Bates, Cass Counties)

Ted Shanks CA (Pike Co.)



It is easy to see why the common snipe is included in a group of birds coined "secretive marsh birds." These birds' impressive camouflage (as seen above) and relative silence keep them well-hidden in the thick vegetation of marshy habitats.

DID YOU KNOW?

.....
The American coot is in the rail family. Unlike the other rails, the coot is duck-like, less secretive, and is hunted during waterfowl season.

The oldest recorded rail species was a coot, and it lived 22 years 4 months!

AMERICAN WOODCOCK

ABOUT WOODCOCK

A migratory species, American woodcock visit Missouri in the fall and spring on their way to and from their wintering grounds in the southeastern states. The woodcock is unique among Missouri's game birds in that it is classified as a shorebird, but spends nearly all of its life in upland forests, forest edges, old fields and meadows. Look for woodcock during the fall hunting season in brushy thickets and bottomland timber during the day and in open fields where they roost at night.



American woodcock

HUNTING AND MANAGEMENT

Woodcock are often overlooked as a game bird in Missouri, and most birds are harvested in pursuit of other game, such as bobwhite quail. Woodcock, however, provide excellent sport when specifically targeted because they readily hold for bird dogs, they can be abundant during the peak of migration, and they are often found on the Department's conservation areas. Woodcock are also fun to hunt because they are tricky fliers that can test even the best upland gunner.

Woodcock season in Missouri begins mid-October and the best hunting during that time is in the northern part of the state. As the birds move south through the state during fall migration, hunting improves. The first two weeks of November are the peak of bird numbers in south Missouri. Hunters should target brushy thickets in old fields, thickly wooded draws in agricultural landscapes, young timber cutovers, and bottomland timber. Savvy hunters will look for the half-dollar-sized white "splash" indicative of woodcock droppings to help narrow the search for occupied habitat.

The Department's public land managers provide quality hunting for American woodcock by creating and maintaining early to mid-successional habitat that is so critical for these birds. Management efforts such as prescribed burning, woodland restoration, and timber harvests are all used to create these types of habitat. Fortunately, this type of management is occurring on Department conservation areas across the state to benefit a variety of wildlife. Quality habitat coupled with lots of room to roam makes Missouri's public lands some of the best places to hunt woodcock in the state.



The woodcock's twittering wing beats at takeoff are unmistakable. You can listen to the wingbeats and the woodcock's "peent" call at mdc.mo.gov/node/2821.

ONGOING WOODCOCK RESEARCH

Researchers at the University of Arkansas are currently studying which types of habitat American woodcock use along their spring migration routes. Department staff are helping in that effort by collecting data at woodcock singing grounds. This information will be used to better describe habitat used by woodcock and thus, help managers to better conserve those habitats. A second University of Arkansas research project involves tagging woodcock with satellite transmitters and monitoring migration timing and routes. This research will help identify areas where habitat management for woodcock is most needed.

2015 FEATURED HUNTING SPOTS

Conservation areas with suitable woodcock habitat can be found across the state. It is always a good idea to call the area manager or local wildlife biologist for tips on hunting locations and bird numbers in specific areas. The migratory nature of woodcock can mean that areas can fill up with birds seemingly overnight. On the other hand, strong cold fronts can also push birds out of an area just as fast.

Below are suggested areas that offer woodcock hunting opportunity. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas.

Talbot CA (Lawrence Co.)

Fort Crowder CA (Newton Co.)

Truman Lake Managed Lands - Upper Tebo Creek and Deepwater Creek (Henry Co.)

Bull Shoals Managed Lands (Ozark, Taney Counties)

William R. Logan CA (Lincoln Co.)

Saline Valley CA (Miller Co.)



DID YOU KNOW?

.....
A common name for the American woodcock is the "timberdoodle."
.....

The primary food of the woodcock is the earthworm and its bill is designed to probe the soil to locate and grasp its prey.

RACCOON

ABOUT RACCOONS

Raccoons are a medium-sized mammal with a noticeable black mask over the eyes and a ringed tail. Males and females look alike, although males are heavier. Raccoons can weigh between 6 and 25 pounds. They prefer timbered habitat near water. They are also common sights in urban and suburban areas. They make dens in hollow trees, caves, rocky crevices, and abandoned woodchuck burrows, among other places.

Raccoons are omnivorous, meaning that they eat both plant and animal foods including fruits, berries, grasses, corn, acorns, other nuts, as well as crayfish, clams, fish, snails, and a wide range of insects, frogs, snakes, bird eggs, mice, squirrels, and rabbits.



HUNTING

The most popular method for raccoon hunting in Missouri is with dogs. Hunters release hounds at night to search for the scent of a raccoon. Once the dogs find the scent, they begin to bark and that lets hunters know they have found a scent trail and gives an indication of which direction the animal is headed. In most cases, the dogs are able to trail the raccoon to a tree where the animal is feeding. The dogs then begin a non-stop chorus of barking referred to by seasoned hunters as “treed,” or the raccoon is up a tree. Once the dogs begin treeing, the search for the raccoon among the branches with the use of a flashlight begins. Occasionally, the tree is hollow and the raccoon finds refuge from the hunters. Other times, the raccoon tricks the dogs by leaving some scent on the tree and creates confusion, allowing for its getaway. Usually, the raccoon is located among the branches by its reflective eyes. A small caliber rifle is most popular to take raccoons after being treed with dogs. Although the basic method is described, there are many variations to this method which include daytime hunting and a wide range of types of dogs.

Another method of hunting raccoons that is growing in popularity is the use of electronic game calls. Since this is a daytime hunting method, only an electronic call and small caliber rifle are needed. Successful use of this method involves locating probable den sights such as hollow trees, large brush piles, or abandoned buildings. Once a suitable location has been found, the hunter places the electronic call so that the raccoons can hear the sound, but not easily locate its source.

Raccoon fighting sounds and the sounds that imitate young raccoons are effective during this time. The hunter hides in a location near the call where they can watch closely for animals approaching the call or coming out of the den locations.

Raccoon hunting success is usually greater on warm afternoons in late winter following an extended period of cold weather.

DID YOU KNOW?

Raccoons were referred to as “little washing bear” by Native Americans, because of their affinity for water and the frequent use of their hands. “Raccoon” is derived from an Algonquin word that means “one who rubs/scrubs/scratches with their hands.”



MANAGEMENT

Raccoons need both denning and food-producing trees. Den trees may be dead or alive, but must contain secure areas for rearing young, and sleeping year-round. Many different trees and shrubs provide food for raccoons. Black cherry, serviceberry, wild plum, dogwood, and blackberry provide summer foods, while oak, hickory, and hazelnut provide food in the winter months. Having den and food trees with access to a stream or pond that has crayfish and frogs provides a diversity of habitat that raccoons can thrive in.

2015 FEATURED HUNTING SPOTS

Below are suggested areas that offer raccoon hunting opportunities. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas.

Deer Ridge CA (Lewis Co.)

Donaldson Point CA (New Madrid Co.)

Happy Holler Lake CA (Andrew Co.)

Indian Hills CA (Scotland Co.)

Lead Mine CA (Dallas Co.)

Poosey CA (Grundy, Livingston Counties)

Settle's Ford CA (Bates, Cass Counties)

Ralph and Martha Perry Memorial Wildlife Area
(Johnson, Pettis, Saline Counties)

Sunklands CA (Shannon, Texas Counties)

Truman Management Lands, Cross Timbers Unit
(Hickory Co.)



A hunting dog "trees" a raccoon, or barks and keeps it up a tree until the hunters arrive.



CROW

AMERICAN FISH

ABOUT CROWS

Missouri is home to two species of crow- the fish crow and the American crow. American crows are, by far, the more common of the two and are found statewide, while the fish crow's range is limited to areas along the Mississippi and Missouri Rivers and a sliver of southwest Missouri. It is difficult to tell the difference between the two species by sight, but their calls are very different and can easily be distinguished. Both species may be hunted in Missouri.

American crows are an adaptable species with a diverse diet that includes fruit, nuts, grain, acorns, insects, carrion, small mammals, eggs, reptiles, and nestling birds. In winter, crows tend to be associated with agricultural areas and wooded habitats along rivers and creeks. Crows are known for their mobbing behavior in which the presence of a potential predator (a hawk or owl) elicits a strong response. One crow's alarm can signal many others to join in chasing a potential predator to drive away the perceived threat. While American crows are still relatively common in Missouri, most crow hunters agree that their numbers plummeted in the early 2000s when the West Nile Virus became established in the state, and populations still have not recovered to previous levels.



American crow

HUNTING

Crows are considered one of the smartest birds in North America, so if you want a bird hunting challenge, this may be the sport for you! The 1940s, 50s, and 60s were the heyday of crow shooting, as it was a very popular sport during that time. Today, it's hard to find anyone who regularly goes afield after the "black bandits." Crows are considered a nuisance by many farmers, and because of this, access may be quickly granted to good crow hunting areas. Crow hunting can provide fast-paced action and many seasoned crow hunters describe it as addictive.

Because crows are so intelligent and have keen eyesight, it's imperative that hunters plan carefully and set up for success. Keep the number of hunters in your party to 2 or 3. More than this number makes it difficult to get everyone hidden and increases the likelihood of being spotted. Once you've chosen a spot to hunt, you should build a blind or find a good place to hide. It's important to make sure the blind has a dense back to avoid your movements being silhouetted and spotted by the crows. Use natural vegetation from the area you're hunting to blend the blind in with the surroundings. Try to set up with the sun at your back to optimize your vision and keep you in the shadows.

Many hunters use decoys placed on the ground in a field to simulate feeding or hung from tree limbs to resembled perched birds. Some hunters use an owl decoy to simulate a flock of crows mobbing the owl, but others report success without the owl. When crows are coming in, remain still until they are well within shotgun range, then rise, swing, and fire in one smooth motion. If you move around during their approach, it's quite likely that the crows will see you and veer away.



HUNTING GEAR

The necessary crow-hunting gear to get started is minimal. You'll need a shotgun, plenty of shells, some camo, a call, and a stool.

- **Guns and Loads:** Most hunters use 12 or 20-gauge shotguns, but even a 28-gauge or a .410 can handle crows if shots are kept inside 30 yards. While many crow hunters use high brass loads, low brass target loads pack ample punch and are easier on the wallet and the shoulder. Remember that if you get into a good hunt, you may fire several boxes of shells. Shot sizes suitable for crows are #6, 7 ½, and 8.
- **Calls:** Crow calls fall into two main categories – mouth calls and electronic calls. Of course, mouth calls take time and practice to master but allow the caller to easily adjust the volume and calling sequence to react to the behavior of approaching birds. Many hunters enjoy the interactive nature and skill that a mouth call requires. Electronic calls use recordings of live crows to attract the attention of nearby birds. These calls often come with a remote control that can be used to adjust the volume and the particular call sequence being used.
- **Clothing:** Crows have excellent eyesight, so hunters should wear camouflage clothing that blends in to the area they'll be hunting. And don't forget to cover your hands and face with gloves and a mask – if not covered, glare from these features can alert crows to your presence.

2015 FEATURED HUNTING SPOTS

Crows are usually found on many conservation areas, but can move in flocks seasonally. Below is a list of selected areas that offer crow hunting opportunities. For more detailed information about an area, visit the Department's Conservation Atlas at mdc.mo.gov/atlas.

Clearwater Lake Management Lands (Reynolds, Wayne Counties)

Coon Island CA (Butler Co.)

Douglas Branch CA (Vernon Co.)

H. F. Thurnau CA (Holt Co.)

Platte Falls CA (Platte Co.)

Plowboy Bend CA (Moniteau Co.)

Rebel's Cove CA (Putnam Co.)

Stockton Lake Management Lands (Cedar, Dade, Polk Counties)

EATING CROW?

To most people, the words "eat crow" mean to admit you're wrong after taking a strong position on an issue. But some crow hunters take the phrase literally, using marinades, spices, and cooking techniques to provide good table fare. Not sure you want to eat a crow? Most folks who've tried it agree that it tastes a lot like dove or duck, so any recipes you enjoy for these species should work well for crow as well. Crow meat can be pretty tough, so using a marinade or tenderizer to help break down the muscle fibers will probably enhance your dining experience. For crow recipes, visit: <http://www.crowbusters.com/recipes.html>.



PREDATORS

COYOTE
RED, GRAY FOX
BOBCAT

ABOUT PREDATORS

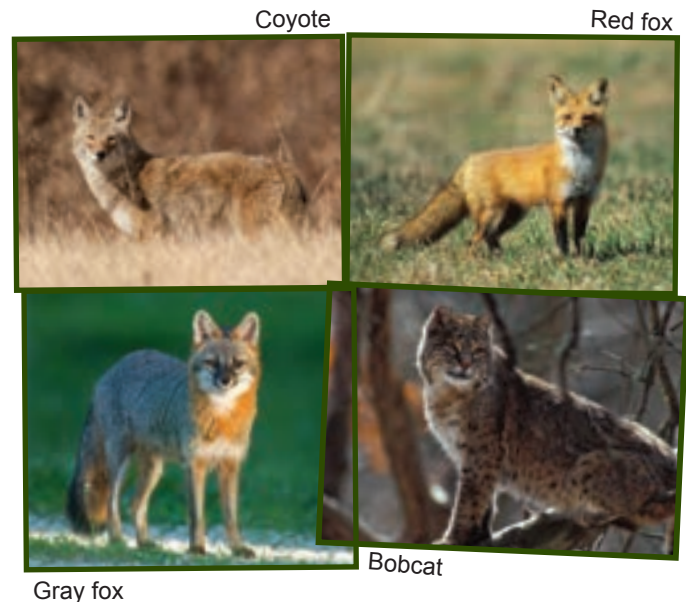
Coyotes, red fox, gray fox, and bobcats are furbearing mammals and can be hunted during prescribed seasons. Coyotes, foxes and bobcats are pursued for their valuable pelts, to alleviate depredation of domestic livestock, and for the sporting opportunity that they provide.

Coyotes are abundant and distributed throughout the state of Missouri. They prefer brushy areas, edges of timbered tracts, and open agricultural country found in the northern Missouri. Coyotes are active both day and night, but activity increases in low light conditions. Coyotes rely primarily on a diet of rabbits and small rodents but may also eat seasonally-available fruits and berries such as wild plums, persimmons, and blackberries, as well as grasshoppers, snakes, and birds. Coyotes are among Missouri's most adaptable species and have figured out to live in very close proximity of humans.

Red foxes occur statewide but are more abundant in northern Missouri. Habitat preferences and food habits are very similar to that of coyotes. Red foxes often live on the edges of small towns and within cities where they can escape one of their predators, coyotes.

Gray foxes occur throughout Missouri but are most abundant in Missouri's Ozarks and heavily forested areas in north Missouri. Food habits are also similar to that of coyotes and red foxes.

Bobcats occur statewide but prefer habitat that is thick and brushy. Second-growth timber stands with a lot of underbrush is perfect for bobcats. Food habits of bobcats are much like the canine predators but bobcats rely more heavily on sight for hunting than smell.



HUNTING AND MANAGEMENT

While coyotes, foxes, and bobcats can be trapped, trapping requires much more gear to get started pursuing these predators compared to hunting. When it comes to predator calling, most hunters already have most of the gear required to get started. Camo clothing that matches the terrain and protects you from the elements is important. Predator hunting can be done by the solo hunter or with a friend or family member. Shotguns or centerfire rifles in .22 caliber are preferred. A reliable electronic game caller with animal vocalizations seems to be the most popular call, but predators can be called in with mouth calls that imitate rabbits or rodents in distress. Extreme conditions in late winter keep prey species numbers reduced and the cold temps keep predators on the move – this time of year can make for an exciting hunt. When a hunter turns on an electronic caller and a hungry predator is nearby, the resulting action can be pretty fast and intense.



HUNTING AND MANAGEMENT, CONTINUED

If no animals are seen within a few minutes of calling, changing locations is necessary. Successful predator hunters will have a game plan that includes 10 or more sets, or locations for each hunt. These sets are based on wind conditions, because predators will smell you and get spooked if you are upwind. If the hunter is unsuccessful at the first setup, move on to the next one.

Keep habitat in mind when calling predators because they are likely going to be near habitat that their prey species prefer. People don't often manage land for coyotes, foxes or bobcats. High predator numbers are often the result of successful small game species management. Habitat suitable for rabbits, quail, deer, and turkey will also be attractive to many small rodents and, in turn, attractive to predators. Pelts of legally-taken furbearers can be sold by the taker during hunting or trapping seasons with an the appropriate permit. The pelts can be tanned and displayed, or used for taxidermy.

2015 FEATURED HUNTING SPOTS

Below are suggested areas that offer predator hunting opportunities. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas.

Apple Creek CA (Cape Girardeau Co.)

Drury-Mincy CA (Taney Co.)

Little Lost Creek CA (Warren Co.)

Pony Express CA (DeKalb Co.)

Ranacker CA (Pike Co.)

Robert E. Talbot CA (Lawrence Co.)

Settle's Ford CA (Bates, Cass Counties)

Ted Shanks CA (Pike Co.)



DID YOU KNOW?

It is rare, but coyotes can breed with domestic dogs.

The resulting "coy-dog" usually more closely resembles the coyote, but domestic dog features are noticeable.

BOWFISHING

ABOUT BOWFISHING

Bowfishing doesn't refer to a species, and is not really fishing at all, but a hunt for fish. Although the word "fishing" is in the sport's name, bowfishing is more similar to small game hunting than to fishing, because it is the pursuit of fish with a bow and arrow. This is a legal method to pursue nongame fish, including bluegill, green sunfish, carp, carpsuckers, suckers, buffalo, drum, gar, and all other species not defined as game fish or listed as endangered in the *Wildlife Code of Missouri*. Bowfishing offers an exciting way to pursue these fish that typically draw little interest with traditional pole-and-line or setline methods.

A fishing license is needed to bowfish. Fishing uses hooks, and fish aren't typically seen during an angler's pursuit of them. Bowfishing is quite different in that fish are first spotted and then shot at with a bow or crossbow. The bow or crossbow shoots arrows attached to a line so that the fish can be retrieved after they're pierced. Due to the water's refraction, connecting with a fish is harder than you might think. The deeper the fish is in the water, the more refracted it is by the water. The angler has to compensate for this refraction, making the shot more difficult. The tendency is to shoot over the fish, so learning how to adjust the shot at a moment's notice on a moving target can prove quite tricky.

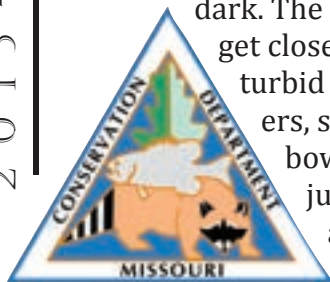


A bowfisherman shoots at a fish below the surface with an arrow attached to a line to retrieve the fish.

HOW TO BOWFISH

Fish can be successfully pursued during the day, but many people bowfish at night when fish are often more active and more visible than in the daylight. Old-timers used small, wood-burning fires in baskets hanging over a boat's bow to illuminate the water at night. These were later replaced by oil lamps and lanterns. Today, halogen lights powered by a gas generator or LED lights are commonly used. Bowfishers without boats use handheld lights along the banks or other vantage point. Moonlight alone does not provide sufficient light for locating and properly identifying fish.

The moon phase and water clarity play an important role in bowfishing. During a full moon, fish are typically more skittish because they feel more exposed, and can be more difficult to get close to; during a new moon it is often easier to get closer to them as they feel more hidden in the dark. The same goes for water clarity – the clearer the water, the more difficult it can be to get close to fish even though you can see them better. The opposite is true of murky or turbid waters. Because fish are pursued by sight and most legal fish are bottom feeders, slowly cruising the shores and still backwaters are generally most productive for bowfishing. Fish will typically be seen feeding in the substrate, along the shore, or just loafing. Smooth, still water is most conducive for proper fish identification and shooting; choppy water makes it more difficult. During the day, the use of polarized sunglasses reduces glare on the water and enhances visibility.



POINTERS

- Staying on the move and covering a lot of water is more successful than staying in one spot.
- If your mobility is restricted, try chumming the water with soured corn, canned corn, grain and molasses pellets, dog food, or cereal to encourage fish to come to you.
- Cautiously closing the distance is the key to getting a shot, but fish can appear and disappear from anywhere in the water at any time. The action can be quite unpredictable to say the least!

BOWFISHING MANAGEMENT

Because nongame fish are pursued and harvested at significantly lower rates than game fish, their populations are typically abundant. The Department conducts some dedicated management for species like alligator gar, working to restore these fish to their former native habitat in southeastern Missouri in recent years.

Invasive species control helps to protect native fish species in Missouri waterways. These invasive species include silver carp, bighead carp, grass carp, and common carp, as well as goldfish. Regulations and other public awareness initiatives to prevent invasive species from inhabiting new waters are ongoing, and regulations permit unlimited harvest with few restrictions on these invasive species since their total eradication would be ideal.

2015 FEATURED BOWFISHING SPOTS

Many conservation areas don't support adequate rough fish (gar, carp, or bowfin) population or an area large enough to offer ample bowfishing opportunities and therefore don't permit bowfishing. Access to large lakes, reservoirs, and rivers provide the best opportunity and success for bowfishing. Try large waters by way of Department accesses, or consider one of these suggested areas. For more detailed information about an area, visit the Department's Conservation Area Atlas at mdc.mo.gov/atlas.

Conservation areas:

Cooley Lake CA (Clay Co.)

Diana Bend CA (Howard Co.)

Eagle Bluffs CA (Boone Co.)

Four Rivers CA (Bates, Vernon Counties)

Hazel Creek Lake (Adair Co.)

Henry Sever Lake CA (Knox Co.)

King Lake CA (Gentry, DeKalb Counties)

Little Compton Lake CA (Carroll Co.)

Long Branch Lake Management Lands (Macon Co.)

Marais Temps Clair CA (St. Charles Co.)

Montrose Lake CA (Henry Co.)

Large lakes and reservoirs:

Big Lake State Park (Holt Co.)

Bull Shoals Lake (Ozark, Taney Counties)

Lake Showme (Scotland Co.)

Lake Contrary (Buchanan Co.)

Lake Wappapello (Butler, Wayne Counties)

Lewis and Clark State Park (Buchanan, Platte Counties)

Mozingo Lake (Nodaway Co.)

Nodaway County Community Lake (Nodaway Co.)

Norfork Lake (Ozark Co.)

QEA MANAGER'S NOTES

Area managers of a sample of the Department's Quail Emphasis Areas (QEAs) talk about the small game hunting outlook, weather, and management for small game on their areas. For conservation area (CA) maps and regulations by area, visit mdc.mo.gov/atlas.

Blind Pony Lake CA (Saline Co.; 660-335-4531) The area has experienced several heavy rainfall events in spring and into summer 2015, which may have had an impact on ground-nesting birds. Nevertheless, we expect that hunters will find good numbers of rabbits and quail. We have been seeing more quail and rabbits on the area this year compared to last. For quail hunting, it may be to your advantage to arrive on the area early to listen for fall covey calls in order to determine where on the area to start your hunt.

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Bonanza CA (Caldwell Co.; 816-675-2205) The area has experienced above average rainfall and cooler temperatures throughout the entire spring 2015 nesting season. Overall, quail populations survived the 2014-15 winter well, but nesting success will likely be limited. Habitat improvement has been focused on prescribed fire, cool season grass reduction, invasive species control, and includes 17,000 feet of edge enhancement. Sunflower fields are struggling through the wet weather but should yield fair numbers of dove come September. Rabbit and squirrel populations look good. Hunters may notice an increase in fall 2015 burn units this year in an effort to promote forb production.

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Cover Prairie CA (Oregon Co.; 417-256-7161) Quail numbers this fall are expected to be higher than the previous few years. A very successful 300-acre prescribed burn, as well as nearly 200 acres of invasive species control, has improved habitat conditions and should prove very beneficial for quail. While management on Cover Prairie primarily focuses on quail, it ultimately provides great hunting opportunities for rabbits as well. On this area, rabbits may not be chased, pursued, or taken during the prescribed quail hunting season. However, there should be some great rabbit hunting opportunity fall of 2015 both before and after the quail season. In 2015, there will be 18 quail hunts by lottery system held on Cover Prairie this year. Successful applicants will be given a one-day permit to hunt on the area during an assigned time period. Each successful applicant will be allowed to take three other hunters, and each party will be allowed to harvest four quail. To learn more about how to apply for these special hunts, call the area number above. Applications will be accepted from September 1 through September 30 and successfully-drawn applicants will be notified by mail by October 15.

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Crowleys Ridge CA (Stoddard Co.; 573-547-4537) The area has experienced several heavy rainfall events in May and June 2015, which may have a negative impact on ground-nesting birds. Between rainfall events, spring 2015 weather conditions allowed us to use prescribed fire for habitat improvement on over 450 acres. We also completed the removal of over 30 acres of overgrown brush in some old field habitats and created multiple brush piles. Quail numbers are increasing and the rabbit and squirrel populations are good.



(Crowleys Ridge continued) Hunting these species can be difficult due to abundant cover on the area. Dove hunting should be fair due to below-average sunflower production in 2015. All small game hunters are required to complete and carry a daily hunting tag which is available at all area parking lots.

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Emmett and Leah Seat Memorial CA (Worth Co.; 660-726-3746) The winter of 2014-2015 was relatively dry and mild until heavy snow and cold temperatures arrived in February. Spring 2015 whistle counts indicated fair winter carryover. Frequent heavy rains persisted through the nesting season and undoubtedly reduced overall production. Intensive habitat management continues on the area to create more usable space for quail. Habitat management is focused on reducing cover of undesirable woody vegetation and diversifying ground cover. Rabbits and pheasants may also be frequently encountered on portions of the area. To have a successful quail hunt at Seat CA, it is essential to work the cover slowly with dogs.

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Lamine River CA (Cooper, Morgan Counties; 660-530-5500) Spring 2015 weather arrived with intermittent cool, wet conditions that lingered into June. The planting season was interrupted by rain, resulting in slow growth of early-planted sunflowers, and delays until mid-June in planting remaining sunflowers and most food plots. Dove numbers were good going into nesting season, and dove hunting prospects will be influenced by maturity and management of sunflowers as summer progresses. Quail numbers are fair on select tracts. June quail monitoring indicated an increase in whistling males compared to last year. Summer and early fall 2015 monitoring will determine production status for quail. Good spring and early summer numbers of young rabbits suggest good rabbit hunting. Squirrel hunting is good on the area, and early November woodcock hunting is typically good. Small game management focused on prescribed burning with follow-up suppression of invasive plants, rank grasses, and woody invasion, to improve nesting and brood habitat. Encouraging shrubby cover like plum, dogwood, and blackberry is ongoing. Cropland wildlife management includes idle crop areas, legumes, and an increase in milo row crop acres. The area is open to statewide regulations for small game hunting.

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Robert E. Talbot CA (Lawrence Co.; 417-452-3879) Quail numbers at Talbot experienced excellent winter carryover from a decent fall 2014 population. Good burning conditions and grazing in grassland areas also created abundant brood-rearing cover. However, heavy rains in May resulted in above-average adult mortality, reducing the number of birds available to nest. Fortunately, most of the heavy rain occurred before nesting had really commenced, but expect quail populations to be down in 2015. Talbot always has good rabbit numbers, though late-born litters may have suffered from the heavy May 2015 rains. Woodcock habitat is in good supply at Talbot and numbers peak every year during the first two weeks of November. Hunters should take advantage of this underutilized gamebird.



Shawnee Trail CA (Barton Co.; 417-842-3588) Fall quail covey counts of 2014 were the second-highest recorded in the last 10 years. However, prolonged spring and early summer rains and flooding on the area during the 2015 nesting season likely resulted in lower than normal production this year for many ground-nesting birds. Due to burn goals being achieved on 900+ acres and over one-third of the agricultural fields being idled, the brood habitat was ample and looked great. Prairie reconstruction efforts continue, and 35 acres of diverse grasslands were planted this year during the dormant season. Staff reported seeing many young rabbits in spring and early summer 2015, suggesting higher than normal rabbit populations. No daily check-in or check-out is required to hunt this area, however, area staff will be conducting random hunter exit surveys to gauge hunter success and satisfaction.

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Thomas Hill Reservoir CA (Macon, Randolph Counties; 660-385-4920) Spring and early summer 2015 were difficult seasons at Thomas Hill. Repeated rainfall events greatly impacted staff's ability to complete the normal amount of prescribed burning and annual food plot plantings in a timely manner. However, the winter months leading up to this wet period were productive. Beneficial management practices for small game were completed including edge feathering, timber thinning, winter wheat plantings, and some prescribed burning. Fall surveys in 2014 showed an increase in quail numbers and early 2015 observations show good carryover going into the nesting season. Hunters frequently report when small game are flushed they head straight for the thick cover created by edge feathering and woodland thinning practices making them difficult to flush again. Rabbit numbers are good on the area. Sunflower planting was completed before the wet part of the spring, so 2015 dove hunting opportunities should be good as well. Plan ahead before coming to Thomas Hill and consider which portion of the area you want to hunt. Highway T near the middle of the lake is closed at the east arm of the lake due to a bridge being out which complicates access to some of the area.

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William R. Logan CA (Lincoln Co.; 573-898-5905) The area experienced an average winter in 2014-2015 with little negative effect on quail numbers. June whistle counts indicated high carryover from an excellent production year in 2014. Management of the areas includes removal of small strips of pioneer tree species to enhance grassland landscapes, conversion of old fields to diverse wildflower seedings, and woodland management through thinning and burning. Quail numbers are fair, while rabbits and squirrels can be found in good numbers. Woodcock hunting can also be good during peak migration periods in thick cover. The area also has numerous small ponds and lakes that offer good frog hunting opportunities too.



SMALL GAME GRAB BAG

Tips, Tricks, and Information for Small Game Hunters

HOW TO SKIN A SQUIRREL

Many folks miss out on some great hunting opportunity and wonderful table fare because they've had a bad experience skinning a squirrel and don't want to go through it again. Squirrels do have very tough skin and loose hair, and it's easy to end up with hair covering the meat. There's more than one way to skin a squirrel, but the tail-pull method has proven to be very effective and easy.

First, don't open the chest/belly until the skin is off. This keeps blood off your hands and hair off most of the meat. If you've had a good day and have several squirrels to dress, skin them all first, then come back and draw the entrails.

Start by laying the squirrel on its belly and bending the tail over the back towards the head. Pluck several tufts of hair from the base of the tail to keep from cutting through the hairs, then take your knife and make an incision through the bottom of the tail base until you hit bone. Twist the tail to separate the bones, then continue cutting through to the skin on the top of the tail, but don't cut through the skin. With your knife tip, loosen the skin from the back a bit and extend the cut a few inches down each rear leg, creating a flap of skin that's attached to the tail.

Once you have a good tail flap, step on the tail close to the body with your heel, and grasping the rear legs, give a steady pull. This will turn the skin inside out and leave very little if any hair on the carcass. If the meat starts to tear, you may need to extend your cuts a bit further down the rear legs. Pull the skin from the carcass all the way down to the head. You may need to work it over the front legs with your fingers, but usually it comes right off. Now go back and grab the small patch of skin still attached to the rear legs that pulled away from the rest of the hide. Pull this patch toward the rear, removing it from the rear legs.

At this point, your squirrel is skinned and ready to be gutted. Lay the carcass on a solid, clean surface, and cut through the neck down to the spine. A couple twists should allow the head – with most of the skin and tail – to come off. Lay the squirrel on its back and pinch the belly skin. Make a small slit in the skin, then carefully use your knife tip to slit the squirrel from pelvis to neck. Carefully cut through the pelvis, taking care not to nick the intestine or bladder, then use two fingers to hook the organs in the chest and pull backwards toward the rear. Carefully trim the diaphragm against the ribs if necessary, and keep pulling back. When you reach the pelvis, everything should pull free, leaving a clean carcass ready for cutting into pieces and cooking.

To see a video of this technique on the Realtree website, visit <http://tinyurl.com/qe66jh9>.



IS THAT RABBIT SAFE TO EAT?

Few game species can match the eastern cottontail for fine eating, but before you put that rabbit on the stove, take a minute to inspect it to make sure it's healthy. Tularemia is a disease caused by the bacterium *Francisella tularensis*. It can be transmitted by various means, but a common path of infection in humans is through contact with infected animal tissue, including blood. Tularemia is transmitted to rabbits through the bite of an infected tick or deer fly. Infected rabbits usually die within a few days of infection, so exposure is less likely in cold months when ticks and biting flies are less numerous and active. Waiting for cold weather to hunt may reduce your risk for encountering an infected rabbit, but it will not eliminate the risk.

Hunters cleaning rabbits should wear latex or nitrile gloves to prevent blood and tissue from contacting their skin, especially if they have any cuts or open wounds on their hands or fingers. While eviscerating the rabbit, check the liver for numerous white lesions about the size of a pin head. If you find these, the rabbit should be discarded and not eaten. Tularemia can also be transmitted through consumption of meat that is not thoroughly cooked, so be sure to heat rabbit meat to a safe temperature that kills any potential disease (minimum of 165 degrees Fahrenheit).

If you come down with flu-like symptoms after handling rabbits, you should seek medical attention and notify your doctor that you might have been exposed to tularemia. Treatment with antibiotics is standard for infected persons.



White lesions on the rabbit's liver are associated with the disease tularemia.
James Runnigen, U.S. Geological Survey

KEEP GAME SEPARATE OR IDENTIFIABLE

Dove hunting is popular with many hunters because of its social aspect. It provides a good opportunity for hunters to go afield with their friends or take their kids or other family members out for a morning or afternoon of fast-paced action. Often, dove hunters sit side-by-side in the same patch of cover. While this allows for some fine fellowship, it is important that hunters keep their harvest separate or identifiable. When hunting with other people, keep your harvested birds separate from one another's, or mark your birds if they're placed in a common pile so that they're identifiable as yours. Regulations require that hunters and anglers keep their game or fish separate or identifiable from those harvested by others. Following this rule helps our Conservation Agents clearly determine who shot how many birds and helps them protect our wildlife resources.



*Thank you for your interest,
and happy hunting!*